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Following the introduction of tapered wall scrolls in September 2003 it is not possible to support some spares for pumps prior to serial number 037869927 for XDS 10's and serial number 037874870 for XDS 5's. Parts not available on older pumps are GA items 101, 201. If any one of these requires replacement then a matched pair will be required. Please refer to service workshop manuals for more information.

1 INTRODUCTION

1.1 Scope and definitions

This manual provides information about the component parts of the BOC Edwards XDS5, XDS10, XDS5C and XDS10C vacuum pumps.

Exploded views of the pump are shown in section 2, together with a list of the component parts and the spares kit from which they are available.

1.2 Parts supplied

The component parts referenced on figures in this manual are listed on tables 1,2 and 3. When you read the tables please take note of the following:

- The 'ref.' Number is the number of the component part on the corresponding figure. The Ref. numbers used within this manual are the same numbers as used in the XDS5/10 General Assembly (GA) Drawing.
- The entries in the 'Kit No. (s)' column are cross-referenced to the kits in section 3. The component part is included as part of the referenced maintenance kit(s).
- If no kit number is listed the item described is not available in a kit, but the code number is given to identify the part.
- The OS Shims and Motor Rotor Shims are listed as 'Special' – please see the table in Section 3 detailing the ranges of shims available in kits.

2 Fixed scroll assembly parts list

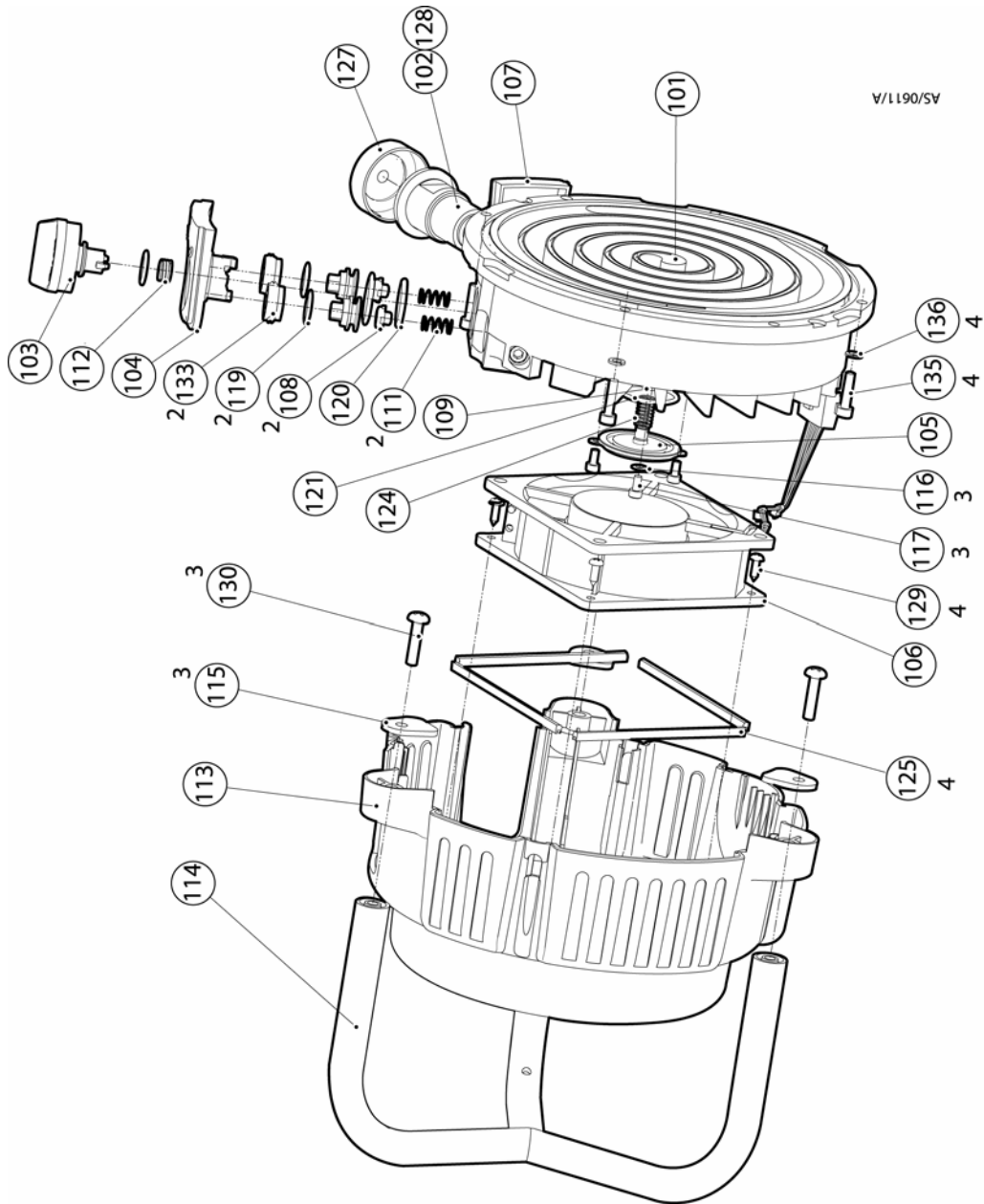


Figure 1 – Exploded view of the fixed scroll assembly

GA Item	Description	Quantity				Kit	Code Number
		XDS5	XDS5-C	XDS10	XDS10-C		
101 *	Fixed scroll XDS5 – 4.03	-	-	-	-	5	
101 *	Fixed scroll XDS5 – 4.10	-	-	-	-	6	
101 *	Fixed scroll XDS10 – 4.03	-	-	-	-	7	
101 *	Fixed scroll XDS10 – 4.10	-	-	-	-	8	
102	Exhaust flange XDS5/10	1	-	1	-	15	
102	Exhaust flange XDS5-C/10-C	-	1	-	1	15	
103	Ballast knob assembly	1	1	1	1	3,4	
104	Gas ballast insert XDS10/10-C	-	-	1	1	3	
104	Gas ballast insert XDS5/5-C	1	1	-	-	4	
105	Exhaust valve cap XDS5/10	1	1	1	1		A72701023
106	Fan assembly	1	1	1	1	9	
107	Exhaust flange shroud XDS10/10-C	-	-	1	1		
107	Exhaust flange shroud XDS5/5-C	1	1	-	-		
108	Gas ballast check valve pad	2	2	2	2	3,4	
109	Exhaust valve pad	1	1	1	1	10	
110	1/8"BSP taper pressure plug	3	3	3	3	14	
111	Spring (gas ballast check valve)	2	2	2	2	3,4	
112	Spring (gas ballast knob)	1	1	1	1	3,4	
113	Fan cowl	1	1	1	1		A25908271
114	Tri-bar	1	1	1	1		A72601030
115	Tri-bar clamp plate	3	3	3	3		A72601029
116	Washer: M4 (exhaust duct)	7	5	7	5	14	
117	Screw: M4 x 8 (exhaust duct securing)	7	5	7	5	14	
119	O ring: 14.6 x 2.4 (gas ballast plugs)	2	2	2	2	3,4	
120	O ring: 23.8 x 2.6 (gas ballast insert)	1	1	1	1	3,4	
121	O ring: 19.5 x 3.0 (exhaust insert)	1	1	1	1	10	
122	O ring: 21.5 x 3.0 (gas ballast knob)	1	1	1	1	3,4	
124	Spring (exhaust valve)	1	1	1	1	10	
125	Fan seal	4	4	4	4	9	
128	O ring: 11.6 x 2.4 (exhaust flange)	1	-	1	-	15	
129	Screw (fan)	4	4	4	4	9	
130	Screw: M6 x 25 (tri-bar clamp plate)	3	3	3	3		212425001
133	Gas ballast plugs	2	2	2	2	3,4	
135	Screw: M5 x 20 (fixed scroll)	4	4	4	4		218315041
136	Washer: M5 (fixed scroll)	4	4	4	4		A55665136

* XDS pumps can have either a 4.03 FS or 4.10 FS depending on motor crank size. Please see service workshop manuals for more details.

Table 1 – Fixed scroll pump parts list

3 Orbiting scroll assembly parts list

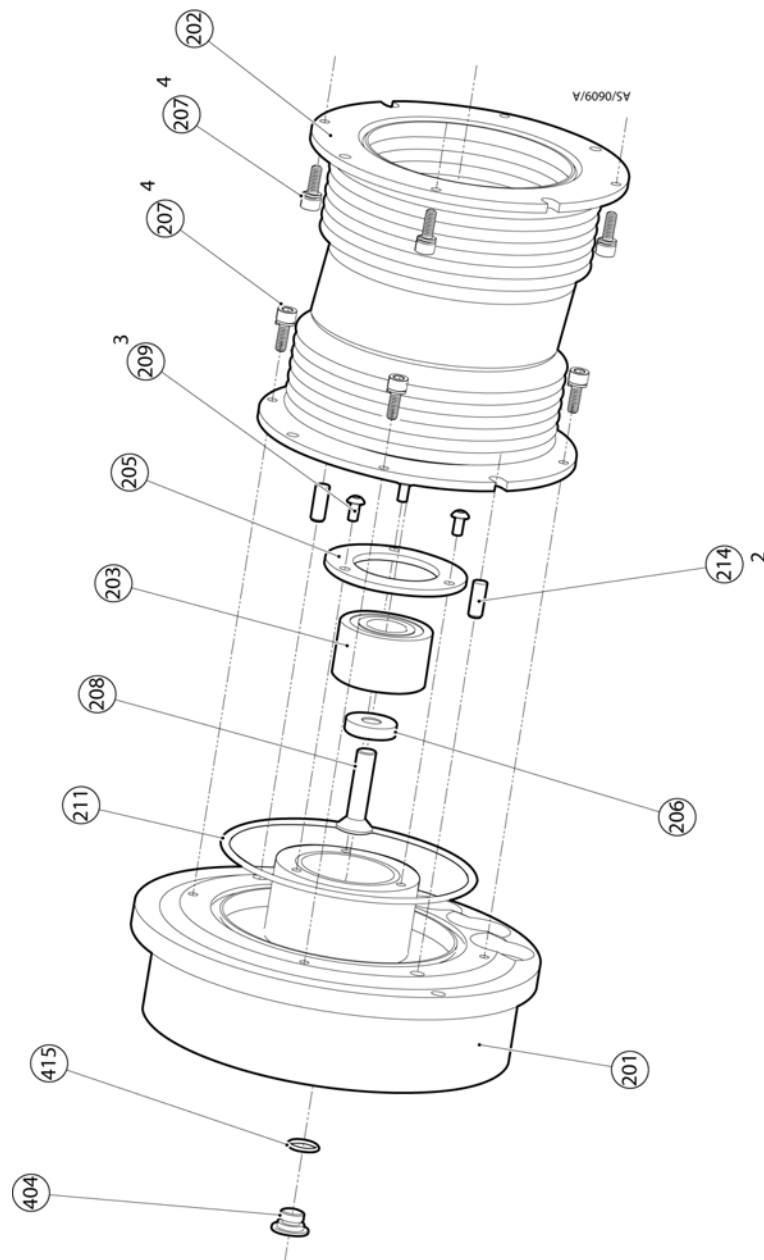


Figure 2 – Exploded view of the orbiting scroll

GA Item	Description	Quantity				Kit	Code Number
		XDS5	XDS5-C	XDS10	XDS10-C		
201	Tapered Wall single size Orbiting scroll XDS5	1	1	-	-	12	
201	Tapered Wall single size Orbiting scroll XDS10	-	-	1	1	13	
202	Bellows	1	1	1	1	2	
203	Bearing: orbiting scroll	1	1	1	1	14	
205	Bearing retainer plate	1	1	1	1	14	
206	Shaft end cap	1	1	1	1	14	
207	Cap head screw M4 x 12 (bellows)	8	8	8	8	2	
208	Screw: M6 x 20 (orbiting scroll)	1	1	1	1	14	
209	Screw: M4 x 8 (bearing retainer plate)	3	3	3	3	14	
210	Washer: M4 (bellows)	4	4	4	4	2	
211	O ring: size (bellows)	1	1	1	1	2	
214	Dowel Pin ST.STL Dia.6 X16	2	2	2	2	12,13	
404	Orbiting scroll plug	1	1	1	1	14	
415	O ring: size (orbiting scroll plug)	1	1	1	1	14	

Table 2 – Orbiting scroll assembly parts list

4 Orbiting motor assembly parts list

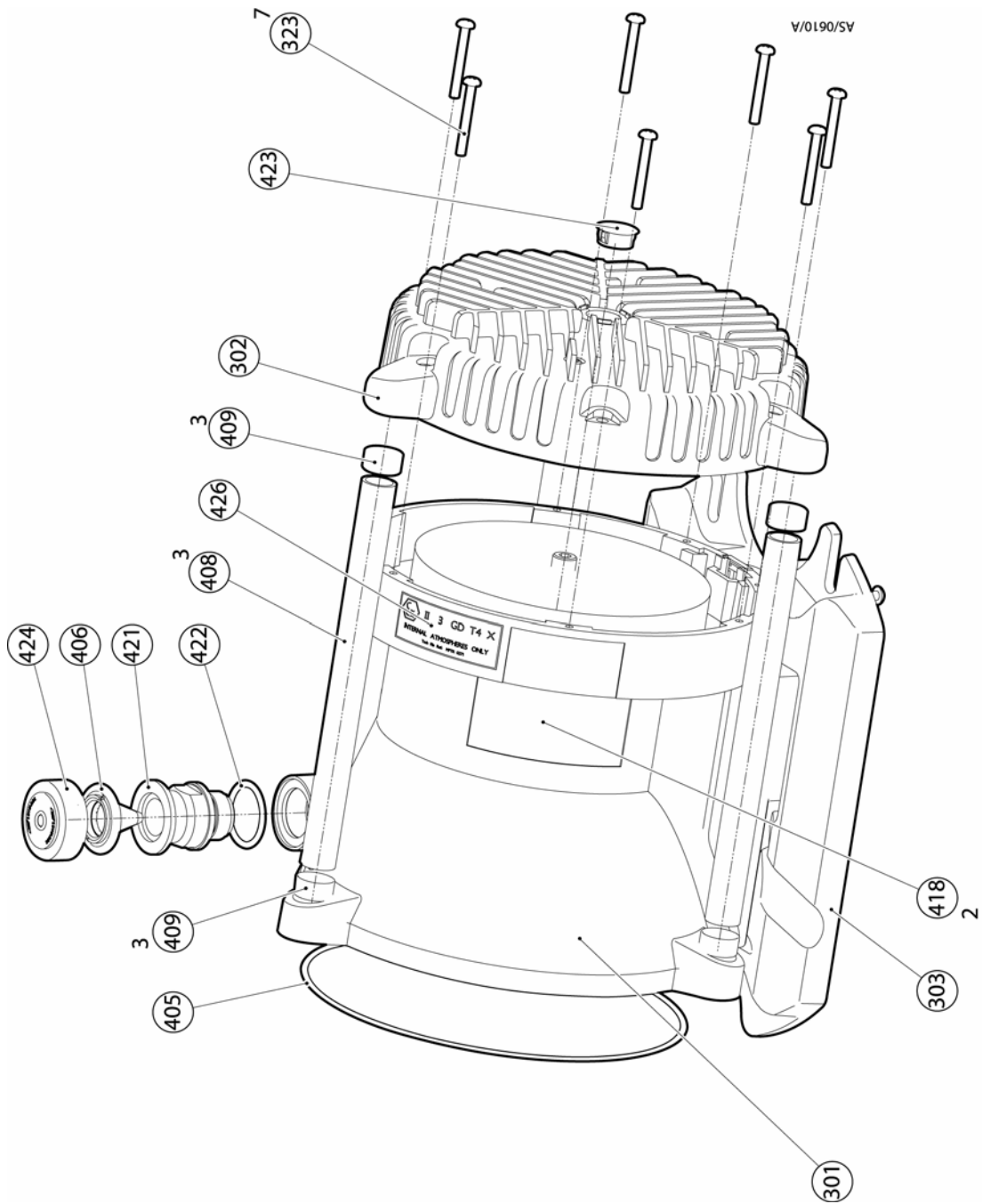


Figure 3 – Exploded view of the orbiting motor assembly

GA Item	Description	Quantity				Kit	Code Number
		XDS5	XDS5-C	XDS10	XDS10-C		
301	Rotating assy	1	1	1	1		
302	Stator pack (Variants ending 903/906)	1	1	1	1		A07125002
302	Stator pack (Variants ending 904)	1	1	1	1		A07125006
302	Stator pack (Variants ending 905)	1	1	1	1		A07125004
303	Base plate	1	1	1	1		A72601044
	Electrical box assembly universal Volts (Variants ending 903/904/906)	1	1	1	1		A07125010
	Electrical box assembly 3-phase (Variants ending 905)	1	1	1	1		A07125012
401	Tip seal (orbiting scroll)	1	1	1	1	10	
402	Tip seal (fixed scroll)	1	1	1	1	10	
403	Shim	1	1	1	1	11	
405	O ring: 199.5 x 3.0 (fixed scroll)	1	1	1	1	10	
406	Inlet strainer	1	1	1	1		A22305067
407	Rubber foot	4	4	4	4		A26501041
408	Handle	3	3	3	3		A72601042
409	Handle securing cap	6	6	6	6		A26501055
413	Washer: M4 (bellows)	4	4	4	4	2	
414	O ring: size (bellows)	1	1	1	1	2	
417	Product label	1	1	1	1		A20001570
418	Side flash label XDS 5	2	-	-	-		A20001571
418	Side flash label	-	2	-	-		A20001671
418	Side flash label	-	-	2	-		A20001572
418	Side flash label	-	-	-	2		A20001672
421	Inlet flange	1	1	1	1		C10501014
422	O ring: 28.2 x 3.5 (inlet flange)	1	1	1	1		H02126026
426	ATEX label	1	1	1	1		A20001865

Table 3 – Orbiting motor assembly parts list

5 XDS Service Kit List

Reference Number	Description	Code Number
1	Motor relay kit	A72601800
2 *	Bellows kit	A72601801
3 *	Ballast kit XDS10/10-C	A72601802
4 *	Ballast kit XDS5/5-C	A72501802
5	Fixed scroll kit XDS5 – 4.03	A72401870
6	Fixed scroll kit XDS5 – 4.10	A72401854
7	Fixed scroll kit XDS10 – 4.03	A72601870
8	Fixed scroll kit XDS10 – 4.10	A72601863
9	Fan kit	A72601804
10 *	Replacement tip seal kit	A72601824
11	Shim kit (5.725)	A72601806
11	Shim kit (5.750)	A72601807
11	Shim kit (5.775)	A72601808
11	Shim kit (5.800)	A72601809
11	Shim kit (5.825)	A72601810
11	Shim kit (5.850)	A72601811
11	Shim kit (5.875)	A72601812
11	Shim kit (5.900)	A72601813
11	Shim kit (5.925)	A72601814
11	Shim kit (5.950)	A72601815
11	Shim kit (5.975)	A72601816
11	Shim kit (5.650)	A72601817
11	Shim kit (5.675)	A72601818
11	Shim kit (5.700)	A72601819
11	Shim kit (6.000)	A72601820
11	Shim kit (6.025)	A72601821
12	TW single size orbiting scroll kit XDS5	A72401864
13	TW single size orbiting scroll kit XDS10	A72601864
14 *	Major service kit	A72601823
15	Exhaust adaptor (Post TW)	A73001804
16 *	Stainless Steel Exhaust kit (Pre TW)	A72601826

* XDS Service kits expanded in section 6

Table 4 – XDS Service Kits

6 XDS Service Kits

Bellows Kit

A72601061	BELLOWS, ROLL FORMED	1
218430111	Cap head screw Stainless Steel M4X12	8
22185-033	O RING (G105) HAADFG105	2

Table 5 – XDS Bellows kit (A72601801)

Ballast kits

A72601007	BALLAST KNOB SUB-ASSEMBLY	1
A72601008	NRV PLUG ASSEMBLY	2
A25908231	GAS BALLAST INSERT XDS10	1
A26501036	GAS BALLAST CHECK VALVE PAD RV	2
A27102061	NRV SPRING 7.6 O/D 17.5LG. !C!	2
A27102029	COMPRESSION SPRINGE1&2M258BO	1
H02122036	O'RING VIT 14.6ID X 2.4SEC!P!	2
H02126132	ORING VIT 0.937ID X.103SEC!N!	1
H02122062	O'RING VIT 21.5ID X 3.0SEC!O!	1

Table 6 – XDS10/10-C Ballast kit (A72601802)

A72601007	BALLAST KNOB SUB-ASSEMBLY	1
A72601008	NRV PLUG ASSEMBLY	2
A25908230	GAS BALLAST INSERT XDS5	1
A26501036	GAS BALLAST CHECK VALVE PAD RV	2
A27102061	NRV SPRING 7.6 O/D 17.5LG. !C!	2
A27102029	COMPRESSION SPRINGE1&2M258BO	1
H02122036	O'RING VIT 14.6ID X 2.4SEC!P!	2
H02126132	ORING VIT 0.937ID X.103SEC!N!	1
H02122062	O'RING VIT 21.5ID X 3.0SEC!O!	1

Table 7 – XDS5/5-C Ballast kit (A72501802)

Replacement Tip Seal Kit

A26501050	EXHAUST VALVE PAD	1
23714-034	ORING VIT 19.5ID X 3.0SEC!N!	1
A27102057	SPRING 9.27 O/D X 19.5LG !C!	1
H02122033	O'RING VIT 11.6ID X 2.4SEC!P!	1
H02126012	ORING VIT 0.487ID X.103SEC!P!	1
A72601073	TIP SEAL, FIXED SCROLL	2
H02122109	O'RING VIT 199.5ID X 3.0SEC!P!	1

Table 8 – Replacement tip seal kit (A72601824)

Major Service kit

A20408001	ANGULAR CONTACT BRG LD17/402RS	1
A72601025	BEARING RETAINING PLATE	1
A72601026	PLUG, ORBITING SCROLL	1
A72601027	SHAFT END CAP, SCROLL PUMP	1
H02122009	O'RING VIT 11.1ID X 1.6SEC!P!	1
H02126026	ORING VIT 1.109ID X.139SEC!P!	1
H02122041	O'RING VIT 19.6ID X 2.4SEC!P!	1
H03517004	1/8" BSP TAPER PRESSURE PLUG	3
218231287	M4 X8 SOC CAP SCREW ST STL	8
218231289	SCR CAP S.ST M4X12	8
218430215	SCR M6X20 CSK SKT HD GRD10.9HT	1
218435286	M4 X 8 SOC HD BLK BUTTON SCREW	3
218981307	WASHER NORMAL SS M4	3
218986607	M4 SHAKEPROOF SS WASHER	7
22185-033	O RING (G105) HAADFG105	2

Table 9 – Major service kit (A72601823)

Stainless Steel Exhaust kit (Pre Tapered Wall)*

A72701020	METAL EXHAUST INSERT XDS-C	1
A72701021	METAL EXHAUST FLANGE XDS-C	1
H02126012	ORING VIT 0.487ID X.103SEC!P!	1
23714-034	ORING VIT 19.5ID X 3.0SEC!N!	1

Table 10 – Stainless Steel Exhaust kit (A72601826)

*This kit is for replacement of plastic and metal exhausts prior to the introduction of Tapered Wall.